The static friction compensating current target I_f, which is calculated through the static friction compensating current calculation means (20), is determined from the rising edge extracted from the differentiated motor angular velocity estimate ω, i.e. $d\omega/dt = \omega_{edg}$, in accordance with a predetermined table. As shown in FIG. 33 of Kifuku et al., I_f becomes zero in the region where the static friction predominates over the steering system friction appearing in the region in the vicinity of the motor angular velocity estimate $\omega \approx 0$. In the vicinity of $\omega \approx 0$, ω gradually increases along a gentle slope with a small inclination angle, and passing through this region ω rises up and the friction of the steering system shifts from the region where the static friction predominates over system friction to the region where dynamic friction predominates. In other words, the rising edge of the differential value ω_{edg} is obtained after the friction of the steering system is shifted into a region of dynamic friction. Thus, the rising edge of ω_{edg} does not correspond to the estimated static friction of the steering system obtained through estimation of the static friction, as disclosed in the present invention. As a result, the static friction compensating current target I_f in Kifuku et al., which becomes zero in the vicinity where the motor angular velocity estimate ω becomes zero, does not participate in the compensation of the static friction of the steering system. Thus, Kifuku et al. do not teach or suggest all of the limitations of independent claim 1. Therefore, claim 1 is believed to be allowable.

Likewise, claims 2-20, which depend from claim 1, are believed to be in form for allowance, at least because of their dependence from claim 1.

Furthermore, with regard to claim 3, the above feature is disclosed at column 21, lines 25-28 of Kifuku et al., which recites that "a similar advantage can be obtained, for example as

shown in FIG. 34, if the edge obtained by processing the Coulomb-friction compensating current target I_c in differential calculation means 19 is arranged to be enhanced." I_c is available when the motor angular velocity exceeds a predetermined value ω_0 as shown in FIG. 28, and therefore the rising edge of the differentiated motor angular velocity ω_{edg}, which is coordinated with the estimate I_c, is quite different from the edge of a motor angular velocity ω, as recited in Applicant's claim 3, being extracted in the vicinity of the motor angular velocity estimate $\omega \approx 0$. Thus, Kifuku et al. fail to teach or suggest the means for estimating the static friction of the steering system by extracting the edge of motor angular velocity, as recited in claim 3.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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